

**REMARKS**

Applicants submit this Reply in response to the non-final Office Action mailed April 26, 2010. Claims 14-22 are submitted for examination in this application, of which claim 14 is independent. By this Reply, Applicants have amended claims 14-18 and 21. No new matter has been added.

In the Office Action, the Examiner objected to the specification as failing to provide proper antecedent basis for the claimed subject matter; rejected claims 14-22 under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement; and rejected claims 14-22 under 35 U.S.C. § 102(b) as being anticipated by EP 0978487 ("Adler").

By this Reply, Applicants have amended independent claim 14 to recite:

A burner for a vapour deposition process, comprising:  
a central orifice for ejecting a glass precursor material, said central orifice being defined by at least a first surface, said central orifice having a concave shaped cross-section in a radial plane; and  
an annular orifice for ejecting an innershield gas, said annular orifice defined by at least a second and a third surface, said annular orifice surrounding said central orifice.

Support for this amendment can be found in Applicants' specification at least at pages 5 and 6 and Figures 1 and 2.

Applicants respectfully traverse all pending rejections for at least the reasons discussed below.

**Objection to the Specification**

In the Office Action, the Examiner objected to Applicants' specification alleging, "The first, second, third, and fourth walls are not disclosed in the specification. . . . As

indicated above, examiner could not find any antecedent basis for the language and any support appears to be very unclear. . . . The burden is now on applicant to demonstrate clear support or antecedent basis for the claim language." Office Action at 2.

In response, Applicants assert that the Examiner appears to be applying an overly restrictive interpretation of the term "wall" and M.P.E.P. § 608.01(o). Applicants' specification and figures quite clearly disclose the claimed walls delimiting both the central and annular orifices of the claimed burner:

However, in the interest of advancing prosecution in this application, Applicants have amended independent claim 14 and dependent claim 16 to replace instances of the word "wall" with the word "surface" and further define the claimed central orifice as "being defined by at least a first surface" rather than "a first and a second wall." The first surface, defining the central orifice, and the second and third surfaces, defining the annular orifice, are very clearly depicted in Figures 1 and 2. Thus, the requirement of M.P.E.P. §608.01(o), i.e. "the meaning of the terms in the claims may be ascertainable by reference to the description," is satisfied.

Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the objection to the specification.

**Rejections Under 35 U.S.C. § 112, First Paragraph**

The Examiner rejected claims 14-22 under 35 U.S.C. § 112, first paragraph, as failing to provide proper antecedent basis for the claimed subject matter. Specifically, the Examiner asserts that he "could find no support for the newly claimed walls - either explicit or implicit." Office Action at 3.

However, as discussed above with respect to the Examiner's objection to the specification, Applicants have amended the claims to recite "surfaces" instead of "walls." Further, Figures 1 and 2 very clearly support the claimed first, second, and third surfaces defining the central and annular orifices, respectively.

The Examiner also rejected claim 14, asserting that "there is no antecedent basis for 'said central nozzle for ejecting an innershield gas['] - line 3 states it is for ejecting a glass precursor material." Office Action at 3. The Examiner appears to have parsed Applicants' claim language in such a way as to create confusion where otherwise none exists. Nevertheless, and again in the interest of advancing prosecution in this application, Applicants have amended independent claim 14 to further clarify the role of the annular orifice. Amended claim 14 now recites in part, "an annular orifice for ejecting an innershield gas, said annular orifice defined by at least a second and a third surface, said annular orifice surrounding said central orifice."

Applicants respectfully note that "the subject matter of the claim need not be described literally (i.e., using the same terms or in *haec verba*) in order for the disclosure to satisfy the description requirement" of 35 U.S.C. § 112, first paragraph. M.P.E.P. § 2163.02. Further, "[m]ere rephrasing of a passage does not constitute new matter. Accordingly, a rewording of a passage where the same meaning remains intact is permissible." M.P.E.P. § 2163.07.

Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the rejection of claims 14-22 under § 112, first paragraph.

**Rejections Under 35 U.S.C. § 102**

Applicants respectfully traverse the rejection of claims 14-22 under 35 U.S.C. § 102(b) as being anticipated by Adler. In order to properly establish that Adler anticipates Applicants' claimed invention under 35 U.S.C. § 102, every element of the claims in issue must be found, either expressly or described under principles of inherency, in that single reference. Furthermore, "[t]he identical invention must be shown in as complete detail as is contained in the... claim." See M.P.E.P. § 2131, quoting *Richardson v. Suzuki Motor Co.*, 868 F.2d 1126, 1236, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989).

Adler does not disclose every element recited in amended independent claim 14. Amended independent claim 14 recites, in part, "A burner for a vapour deposition process, comprising: a central orifice for ejecting a glass precursor material, . . . said central orifice having a concave shaped cross-section in a radial plane . . . ."

In the Office Action, the Examiner asserts that Figures 4 and 4A of Adler depict a central nozzle having a concave cross-section. Specifically, the Examiner asserts, "Looking to figures 4 and 4A of Adler, 302 and 54 together comprise the central nozzle (i.e. a structural nozzle) . . . It has at least two shapes that are concave (as defined by applicant in the specification[]). The cross-section of 54 itself meets the definition, as well as the 54 and 302 assembled together." Office Action at 4.

Adler discloses a burner exhibiting a "tube-in-tube" design. Abstract. In one embodiment, depicted in Figures 4 and 4A, Adler describes the placement of a restriction rod 54 inside the innermost tube of the burner. However, independent claim 14 has been amended to recite, "a central orifice . . . having a concave shaped cross-

section." Restriction rod 54 of Adler is not an "orifice" or opening. Moreover, the plurality of orifices or openings defined between the outer edges of restriction rod 54 and the interior wall of the innermost tube 302 appear to be oval in shape and, therefore, do not exhibit "a concave shaped cross-section." Nor are any of those orifices "central" within the burner. Thus, Adler nowhere appears to disclose, "a central orifice for ejecting a glass precursor material . . . having a concave shaped cross-section in a radial plane."

For at least these reasons, Applicants respectfully request that the Examiner reconsider and withdraw the rejection of independent claim 14 under 35 U.S.C. § 102(b) based on Adler. Furthermore, claims 15-22 depend from independent claim 14 and, thus, contain all the elements and recitations thereof. As a result, Applicants similarly request that the Examiner reconsider and withdraw the rejections of claims 15-22 under § 102(b).

#### Claim Scope

It is to be understood that Applicants are in no way intending to limit the scope of the claims to any exemplary embodiments described in the specification or abstract and or shown in the drawings. Rather, Applicants believe that they are entitled to have the claims interpreted broadly, to the maximum extent permitted by statute, regulation, and applicable case law.

#### CONCLUSION

In view of the foregoing amendments and remarks, Applicants respectfully request reconsideration and reexamination of this application and the timely allowance of the pending claims.

If the Examiner believes that a telephone conversation might advance prosecution of this application, the Examiner is cordially invited to call Applicants' undersigned attorney at (404) 653-6435.

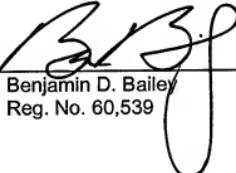
Applicants respectfully submit that the Office Action contains a number of assertions concerning the related art and the claims. Regardless of whether those assertions are addressed specifically herein, Applicants respectfully decline to automatically subscribe to them.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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GARRETT & DUNNER, L.L.P.

Dated: July 12, 2010

By:   
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